





Created: 1 day, 0 hours after earthquake

**PAGER** 

Version 3

# M 5.4, 40 km NE of Barcelona, Philippines

Origin Time: 2023-12-02 15:22:04 UTC (Sat 23:22:04 local) Location: 8.3678° N 126.7344° E Depth: 48.4 km

**Estimated Fatalities** 10,000 1,000

and economic losses. There is a low likelihood of casualties and damage.



**Estimated Population Exposed to Earthquake Shaking** 

ESTIMATED POPULATION EXPOSURE (k=x1000)		_*	8,743k	1,306k	0	0	0	0	0	0
ESTIMATED MODIFIED MERCALLI INTENSITY		I	II-III	IV	V	VI	VII	VIII	IX	X+
PERCEIVED SHAKING		Not felt	Weak	Light	Moderate	Strong	Very Strong	Severe	Violent	Extreme
POTENTIAL DAMAGE	Resistant Structures	None	None	None	V. Light	Light	Moderate	Mod./Heavy	Heavy	V. Heavy
	Vulnerable Structures	None	None	None	Light	Moderate	Mod./Heavy	Heavy	V. Heavy	V. Heavy

<sup>\*</sup>Estimated exposure only includes population within the map area.

### Population Exposure

population per 1 sq. km from Landscan

#### Structures

Overall, the population in this region resides in structures that are a mix of vulnerable and earthquake resistant construction. The predominant vulnerable building types are unknown/miscellaneous types and heavy wood frame construction.

### **Historical Earthquakes**

Date	Dist.	Mag.	Max	Shaking
(UTC)	(km)		MMI(#)	Deaths
1987-05-23	143	5.7	VII(70k)	1
1990-02-08	278	6.7	VIII(96k)	1
2002-03-05	381	7.5	VIII(12k)	15

Recent earthquakes in this area have caused secondary hazards such as landslides that might have contributed to losses.

## **Selected City Exposure**

from GeoNames.org						
MMI	City	Population				
IV	Hinatuan	10k				
IV	Tidman	3k				
IV	Loyola	3k				
IV	Barcelona	4k				
IV	Bislig	68k				
IV	Bigaan	3k				
Ш	Butuan	310k				
Ш	Libertad	250k				
Ш	Magugpo	233k				
Ш	Davao	1,213k				
Ш	Digos	116k				

bold cities appear on map.

(k = x1000)

						per i sq. kili ilol	
0	5	50	100	500	1000	5000	10000
	25.8	°E	1	27.0°E			\
	Surigao						
*		Cantilar					
8.8 N	Butuar	THE REAL PROPERTY.	)				
		Bah-Bah	₹ *				
Malay Valenci	a	Mor.ka	Bislig				
Quezor 7.6°N		Tagum	}				
	Dava		Manay			for	
2	km 50	100	0				

PAGER content is automatically generated, and only considers losses due to structural damage. Limitations of input data, shaking estimates, and loss models may add uncertainty.